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| Subject: Mathematics Year 9 Curriculum Map 2022-2023 | | | |
| Terms | **Topics covered** and **core knowledge and skills** | Links to careers | Links to the Knowledge organiser and other additional resources |
| Half term 1 | Fractions, Decimals, Percentages Review:  Understand the connections between methods of calculation for fractions, decimals and percentage  Be able to apply the four operations to fractions, decimals and percentage  Probability:  Understand probability is a numerical measure of chance from 0 to 1 inclusive  Be able to calculate the probability of single independent events  Compare probabilities using a variety of representations  Sets, Venns and Sample Space:  Understand set notation for intersections, unions, complements and the universal set  Be able to identify and interpret sets described by notation and within Venn diagrams  Understand probability from set notation and Venn diagrams  Be able to form and interpret Venn diagrams in the context of probability | Fractions, Decimals, Percentages Review:  Fractions - <https://www.youtube.com/watch?v=3pccvFEWO0k>  Decimals - <https://www.youtube.com/watch?v=X0Gl72XKiyI>  Percentages - <https://www.youtube.com/watch?v=7EB0H1bhGTo>  Probability:  <https://www.youtube.com/watch?v=cJ1QPiGnGEM>  Sets, Venns and Sample Space:  <https://www.youtube.com/watch?v=cJ1QPiGnGEM> | This link would take you to the KO on our website  <https://classroom.thenational.academy/subjects-by-key-stage/key-stage-3/subjects/maths>  <https://www.bbc.co.uk/bitesize/subjects/zqhs34j>  <https://vle.mathswatch.co.uk/vle/>  <https://maritime.rivoagency.com/admin/wp-content/uploads/sites/20/2022/10/Unit-1-FDP-Review-KO.pdf>  <https://maritime.rivoagency.com/admin/wp-content/uploads/sites/20/2022/10/Unit-2-Probability-KO.pdf>  <https://maritime.rivoagency.com/admin/wp-content/uploads/sites/20/2022/10/UNit-3-Sets-and-Venn-KO.pdf> |
| Half term 2 | Solving Simultaneous Equations Algebraically:  Be able to solve and manipulate linear equations with one or more variables  Understand how equivalence can be maintained while scaling and rearranging equations  Understand how variables and unknowns interact within a system of equations  Understand that addition and subtraction of simultaneous equations can result in the elimination of a variable  Be able to use equivalent equations – through scaling and rearranging – to solve simultaneous equations  Understand how substitution can be used to manipulate algebra  Be able to reduce the number of variables in an equation through substitution  Solving Simultaneous Equations Graphically:  Understand coordinates as solutions to linear equations, including intersections as simultaneous solutions  Be able to solve simultaneous linear equations graphically  Understand parallel lines have no solution as they do not intersect  Be able to identify whether a pair of simultaneous equations have a solution algebraically and graphically  Connect graphical and algebraic representations of linear relationships | Solving Simultaneous Equations:  <https://www.youtube.com/watch?v=z5p8MQSGh0w> | <https://maritime.rivoagency.com/admin/wp-content/uploads/sites/20/2022/10/Unit-4-and-5-Simultaneous-Equations-KO.pdf> |